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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,790	01/29/2007	Vesa Laaksonen	43289-230079	6502

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EXAMINER	
SLAWSKI, BRIAN R	
ART UNIT	PAPER NUMBER
1791	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/574,790	LAAKSONEN ET AL.	
	Examiner	Art Unit	
	BRIAN R. SLAWSKI	1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 August 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *4-7* is/are pending in the application.

4a) Of the above claim(s) *6 and 7* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *4 and 5* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

LABEL LAMINATE AND A METHOD FOR MANUFACTURING A LABEL LAMINATE

Detailed Action

1. Applicant's request for continued examination filed August 3, 2010, was received. Claim 4 was amended.

2. The text of those sections of Title 35, U.S. Code, not included in this action can be found in the prior Office Action issued on August 3, 2009.

Claim Rejections—35 USC §103

3. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kiyohara et al. (US 2002/0022102) in view of Nandy et al. (US 2001/0030020), Steidinger (US 5,700,536), Ghavt (GB 1,420,743), and Takemoto et al. (EP 0 353 972).

Regarding claim 4, Kiyohara et al. teach a method for making a printable label laminate [0001, 0047] optionally without a release layer, the laminate comprising first and second label material layers 11 and 12 each having a face side and a back side, the method comprising: forming adhesive areas directly on the surface of each material layer 11, 12, in a pattern such that adhesive areas 13, 14 and non-adhesive areas 15, 16 alternate on the face side of each material layer; aligning the adhesive areas 13 on the first layer 11 with the non-adhesive areas 16 on the second layer 12 and aligning the non-adhesive areas 15 on the first layer 11 with the adhesive areas 14 on the second layer 12; and attaching the face side of the two layers 11, 12 to each other in this alignment (Abstract;

Fig. 1-3; [0001, 0007-0009, 0018, 0033-0036]). Kiyohara et al. teach that, while separate strip layers can be formed on the face sides of the label material layers 11, 12 in their non-adhesive areas 15, 16, alternatively, the adhesive areas 13, 14 can be attached directly to non-adhesive areas on the label material layers 11, 12 themselves, so that each label material layer acts as a strip layer for the opposing label material layer (i.e., so that the label laminate does not have a release layer) [0037-0038].

Kiyohara et al. are silent as to the composition of the label material layers and adhesive. However, it would have been obvious to one of ordinary skill in the art to ensure that each material layer has the properties taught by Kiyohara et al.—i.e., is printable, adherable, and able to serve directly as the strip layer for the other. Nandy et al. teach that polyethylene films are commonly used as a printable label material [0001-0002], and make a printed label laminate by extruding from nozzle 40 a hot-melt pressure-sensitive adhesive (PSA) onto a strip layer 50, pressing the adhesive-coated strip layer onto a polyethylene film 80 to form a label laminate, then printing images on the polyethylene film to form labels (Fig. 1-2; [0008, 0009, 0014, 0016, 0022]). One of ordinary skill in the art would have learned from Nandy et al. that a polyethylene film and a hot-melt PSA would be suitable materials for the label material layers 11, 12 and adhesive of Kiyohara et al., polyethylene being commonly used for printable labels and adherable to strip layers via hot-melt PSA.

Kiyohara et al. are silent as to how their adhesive is applied. Nandy et al. teach extruding a uniform layer of hot-melt pressure-sensitive adhesive, but note

that it is also known in the art to apply hot-melt PSA in an array of dots onto adhesive labels [0006]. Further, Steidinger makes a label laminate by adhering a label material layer to a strip layer with a hot-melt PSA 124, applied to either layer by a hot melt extruding or screen printing unit 38/43, noting that both kinds of units are well known in the art for applying hot-melt adhesives (Abstract; Fig. 6, 11; col. 3, L. 15-24; col. 4, L. 66-67; col. 5, L. 1-4, L. 7-13, L. 36-43). Ghavt also teaches that a hot-melt PSA can be printed by several techniques such as nozzle-extrusion and screen printing, where the latter produces discrete three-dimensional adhesive dots 7 on the sheet (Fig. 1, 2; p. 1, L. 8-12, L. 34-51; p. 2, L. 41-48, L. 88-90, L. 98-113; p. 3, L. 73-81, L. 105-112, L. 121-126; p. 4, L. 1-10, L. 63-67). It would have been obvious to one of ordinary skill in the art to form the adhesive areas 13, 14 of Kiyohara et al. by screen printing three-dimensional dots of the hot-melt PSA taught by Nandy et al., because Nandy et al., Steidinger, and Ghavt teach that it is well known to apply such adhesives to labels by screen printing an array of dots.

Ghavt further notes that the carrier sheet should have a release surface able to transfer the PSA printed thereon onto another object, and that plastic films having an inherently low degree of affinity for the adhesive, such as polyethylene, may be used without silicones for this purpose (p. 1, L. 34-66). Hence, one of ordinary skill in the art would have understood from Nandy et al. and Ghavt that polyethylene films would be well suited for both label material layers 11, 12 of Kiyohara et al., being printable and having sufficiently modest affinity for hot-melt pressure-sensitive adhesives as to serve as each other's strip

layers without requiring additional release agents. As noted by Applicant in the instant specification (p. 3, L. 24-25), the non-adhesive areas 14, 16 of such polyethylene films applied in the method of Kiyohara et al. will inherently have surface energy of at least 25 dynes.

Ghavt does not fully describe the three-dimensional shape of the screen-printed hot-melt PSA dots 7, but notes that the adhesive should be sufficiently viscous to maintain its physical shape upon printing, without slumping or flowing (p. 2, L. 102-121). Takemoto et al. similarly teach screen printing hot-melt pressure-sensitive adhesive dots on any of various flexible paper or plastic backing materials to produce an easily peelable adhesive tape (Abstract; Fig. 3, 4; col. 1, L. 1-3; col. 3, L. 12-15; col. 5, L. 54-57; col. 6, L. 51-58; col. 7, L. 1-5, L. 24-26, L. 35-38). Takemoto et al. teach that by screen printing the adhesive dots 30 in hemispherical form so that the area that contacts the backing 14 is larger than the area that contacts the surface 40 to which the backing is adhered, the tape can be more easily and less destructively peeled from the surface 40 (Fig. 5, 8; col. 3, L. 21-24; col. 4, L. 21-33; col. 9, L. 35-52). It would have been obvious to one of ordinary skill in the art to screen-print the adhesive areas 13, 14 of Kiyohara et al. in the form of the hemispherical dots taught by Takemoto et al., in order to make the label material layers 11 and 12 more easily peelable from each other.

4. Regarding claim 5, Ghavt teaches in particular that a rotary screen printing method is preferred for applying regular patterns of pressure-sensitive adhesive

7 to a flexible carrier sheet 2 (p. 2, L. 88-90, L. 98-114; p. 3, L. 100-126; p. 4, L. 1-10; Fig. 1, 2), so that it would have been obvious to one of ordinary skill in the art to apply the adhesive areas 13, 14 to the label material layers 11, 12 of Kiyohara et al. using this rotary screen method.

Response to Arguments

5. Applicant's arguments filed on June 3, 2010, have been fully considered but they are not persuasive. Applicant argues that the combination of Kiyohara et al., Nandy et al., Steidinger, Ghavt, and Takemoto et al. does not suggest a method of making a printable label laminate without a release layer, having adhesive areas formed directly on a surface of an intended label material, wherein two material layers are attached together and are releasable from each other without a release layer. The examiner finds that Kiyohara et al. explicitly disclose these limitations in the description of their process. See paragraphs [0001] ("The present invention relates to a label and a printing method for the label..."), [0036] ("Each of the adhesive layers 13 formed on the one-side label base material 11..."), and [0037-0038] ("...The one-side label base material 11 works as a strip layer of the other-side label base layer 12. On the other hand, the other-side label base material 12 works as a strip layer of the one-side label base material 11. Accordingly, no strip paper sheet needs to be provided.")

Applicant argues that the adhesive dots taught by Takemoto et al. are not for attaching together two material layers, but rather for adhering tape or bandages to the skin. The examiner responds that other references more

immediately related to the peelable labels of Kiyohara et al.—Nandy et al., Steidinger, and Ghavt—are cited as teaching that hot-melt pressure-sensitive adhesives are suitably applied to label materials by screen printing an array of dots, with Ghavt teaching that the three-dimensional shape of the dots as applied is important in this context (p. 2, LL. 115-121). Takemoto et al. provides further detail on this point of Ghavt, explaining that hot-melt pressure-sensitive adhesive dots screen-printed on a flexible backing are ideally hemispherical, to provide a large contact area with the backing but a small contact with a surface to which the backing is stuck, so that the backing can be easily peeled (Fig. 5, 8; col. 3, LL. 21-24; col. 4, LL. 21-33; col. 5, LL. 54-57; col. 6, LL. 54-58; col. 7, LL. 1-5). Takemoto et al. further teach that this technique is applicable to various industrial tapes, such as duct tape and masking tape, in addition to medical bandages (col. 7, LL. 21-26), so that one of ordinary skill in the art would have recognized the teachings of Takemoto et al. as relevant to the label laminate of Kiyohara et al. in light of Nandy et al., Steidinger, and Ghavt.

Applicant argues that Kiyohara et al. teaches continuous adhesive layers rather than a pattern of dots. The examiner maintains that the configuration of the adhesive patterns is not explicit in Kiyohara et al. At any rate, Nandy et al. [0006], Steidinger (col. 5, L. 1-4, L. 7-13), and Ghavt (p. 2, L. 41-48, L. 88-90, L. 98-113; p. 3, L. 73-81) all teach that it is well known to deposit hot-melt pressure-sensitive adhesives on label material in an array of dots, as by screen printing, with Takemoto et al. explaining that hemispherical screen-printed dots are ideal for peelable adhesive tapes, so that it would have been obvious to one of

ordinary skill in the art to provide the adhesive for the double-sided label of Kiyohara et al. in this pattern.

Applicant argues, "There is nothing in Kiyohara et al. to suggest that strip layers are anything but continuous regions of label base material." With reference to paragraphs [0037-0038] of Kiyohara et al., the examiner agrees. As the examiner understands it, the same is true of Applicant's invention.

The examiner believes that the cited combination of references would have taught all of the claimed limitations to one of ordinary skill in the art, for the reasons described above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRIAN R. SLAWSKI whose telephone number is (571)270-3855. The examiner can normally be reached on Monday to Thursday, 7:30 a.m. to 5:00 p.m. ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino, can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brian R. Slawski/
Examiner, Art Unit 1791

B.R.S.

/Richard Crispino/
Supervisory Patent Examiner, Art Unit 1791